



Idaho State Department of Agriculture Division of Agricultural Resources

Pesticides and Water Quality Education Project for Idaho

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Introduction

In 2004 the Idaho State Department of Agriculture (ISDA) water program was awarded a pesticides and water quality education discretionary grant by the Environmental Protection Agency (EPA). The purpose of this project was to further educate pesticide applicators and citizens for the protection of ground and surface water quality from pesticide contamination. This project compliments the ISDA Ground and Surface Water Pesticide Program and the Idaho Pesticide Management Plan (PMP).

ISDA staff produced educational materials related to ISDA pesticide water quality projects and data. Recent projects and data of greatest importance and interests were chosen. Based on priorities, certain areas of the state became a focus of this project. Areas of highest probability for leaching and recent pesticides and ground water data were a focus. Educational products were used and distributed to applicators via workshops, conferences, mailings, newsletters, and the internet. Products will continue to be disseminated in the future.

Results

Brochures, Reports, Summaries, and Newsletters

A series of brochures, reports, summaries, and newsletters were produced by ISDA water program staff on a variety of pesticide related topics (Table 1 and 2). Six fact sheets summarized ground water pesticide detections in various geographical locations in Idaho where agriculture is the dominant land use. The fact sheets were designed to educate local pesticide applicators of pesticides that had leached into their local ground water. One fact sheet summarized pesticide uses and leachability ratings for 30 pesticides that are listed as pesticides of national concern by the EPA. The pesticide leachability fact sheet was developed to provide applicators with a general guide and to educate applicators and the public of these issues. One fact sheet details the results from the 2004 Clearwater Basin

Pesticide Monitoring Project conducted by ISDA. That project was fund from EPA Region 10 discretionary grant money and focused on the sampling of eight surface water tributaries to the Clearwater River in north central Idaho.

The fact sheets were mailed to pesticide applicators registered with ISDA's pesticide license program (Table 1). The fact sheets that dealt with a specific geographical region were sent to pesticide applicators within the same county. All of the pesticide applicators who received a summary of pesticide detections in their county also received the pesticide leachability fact sheet. The fact sheets are also available on ISDA's website. Table One lists the fact sheets and the number of applicators who received the fact sheets.

In addition to producing fact sheets, ISDA water program also produced brochures that were handed out to pesticide applicators at workshops around the state. The brochures are also available on ISDA's website. Table Two provides a description of the information available in the brochure.

Workshops, Conferences, and Schools

Another focus of this project was to conduct education efforts at workshops and conferences (Table 3). These events were mostly pesticide recertification workshops, conferences, or special schools that ISDA staff organized or participated in. ISDA staff held events in Burley, Twin Falls, Emmett, Ashton, St. Anthony, Hailey, Blackfoot, Idaho Falls, Fort Hall, Caldwell, Nampa, Jackpot, and Pocatello (Table 3). The Pocatello workshop was a two day event for the Idaho Potato School. The Jackpot, Nevada presentations were for the annual Far West Agribusiness Association Conference. The Fort Hall workshop was in coordination with the Sho-Ban Tribe to educate pesticide applicators that conduct business within and outside the reservation boundary. The other locations were general recertification workshops. At some locations, University of Idaho Extension, Soil and Water Conservation Districts, and agricultural industry

Table 1. Fact sheet distribution information.

Product Type	Product Name	Distribution	Location of Distribution	Number of People	Significant Issue in Area
Surface Water Fact Sheet	Evaluation of Pesticide Residue Clearwater Basin North Central Idaho	Mailing and website	Idaho, Lewis, Latah, Clearwater and Nez Perce Counties	911 pesticide applicators*	13 types of pesticides found in 6 tributaries to the Clearwater River
Ground Water Fact Sheet	Southern Clearwater Plateau Volcanic Aquifer Pesticide Detections and Idaho's Pesticide Management Plan	Mailing and website	Idaho, Lewis, Latah, Clearwater and Nez Perce Counties	911 pesticide applicators	Level 2 Atrazine and DEA detections and various low level pesticides detections in ground water
Ground Water Fact Sheet	Middle Henrys Fork Basin Pesticide Detections and Idaho's Pesticide Management Plan	Mailing and website	Freemont County	159 pesticide applicators; 48 homeowners	Level 3 Triallate detection and various low level pesticide detections in ground water
Ground Water Fact Sheet	Northern Owyhee County Aquifers Pesticide Detections and Idaho's Pesticide Management Plan	Mailing and website	Owyhee County	133 pesticide applicators; 43 homeowners	Level 2 Dacthal detections and various low level pesticide detections in ground water

Table 2. Brochure distribution information.

Product Type	Product Name	Distribution	Location of Distribution
Brochure	Understanding Pesticide Product Labels	Pesticide Workshops and website	Various pesticide workshops around the state
Brochure	Protecting Ground Water Idaho's Pesticide Management Plan	Pesticide Workshops and website	Various pesticide workshops around the state
Brochure	Pesticide Application and Water Quality	Pesticide Workshops and website	Various pesticide workshops around the state
Brochure	Container Recycling Operation (CROP)	Pesticide Workshops and website	Various pesticide workshops around the state

Table 3. Locations and chemical constituents evaluated from ground water.

Pesticide Discretionary Project - Workshops				
Location	Attendance	Agenda Highlights	Disseminated Materials	Feedback
Burley	76	<ul style="list-style-type: none"> Home*A*Syst-Protecting your drinking water. Groundwater Protection-Monitoring/PMP Rule 	<ul style="list-style-type: none"> Pesticides and Water Quality CROP Program Idaho PMP PMP Rule Home*A*Syst Understanding Pesticide Label Region Specific Fact Sheet 	Positive
Twin Falls	52			
Emmett	17			
Ashton	41			
St. Anthony	13			
Hailey	18			
Blackfoot	10			
Idaho Falls	8			
Fort Hall	16			
Caldwell	123	<ul style="list-style-type: none"> Pesticide/Nitrate Ground-water Monitoring and Protection Program for Agriculture Groundwater Monitoring Results and PMP Pesticides and Water Quality 	<ul style="list-style-type: none"> Pesticides and Water Quality CROP Program Idaho PMP PMP Rule Home*A*Syst Understanding Pesticide Label Region Specific Fact Sheet 	
Nampa	70			
Jackpot, NV Two days	280/78			
Pocatello Two days	55/40			
Total	897			

representatives were involved with planning and implementation of the workshops. Training topics included: pesticide and water quality issues, water quality monitoring results, Idaho's PMP, Idaho PMP rules, Idaho Home & Farm*A*Syst Program, understanding pesticide labels, regional or local specific issues and reports, integrated pest management, weed management, and ISDA container recycling and pesticide disposal programs. A total of 897 people were trained at these events (Table 3).

Conclusions

This project has served as a valuable tool to educate applicators and the public about protecting Idaho ground and surface water quality from pesticides. This will serve to further protect water quality and help protect the health of Idaho citizens. This project has been measured by the number of workshops, location of the workshops, numbers of applicators in attendance, materials presented, materials produced, people reached with materials, and quality of products produced. Several pesticide applicators have contacted ISDA after receiving the pesticide educational products. They have provided ISDA with additional information about pesticide use in their areas and have requested additional information regard-

ing pesticide leachability and protection of ground and surface water. This has assisted in initiating additional dialogue and communication with applicators. This will assist in protecting ground and surface water from pesticide impacts.

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